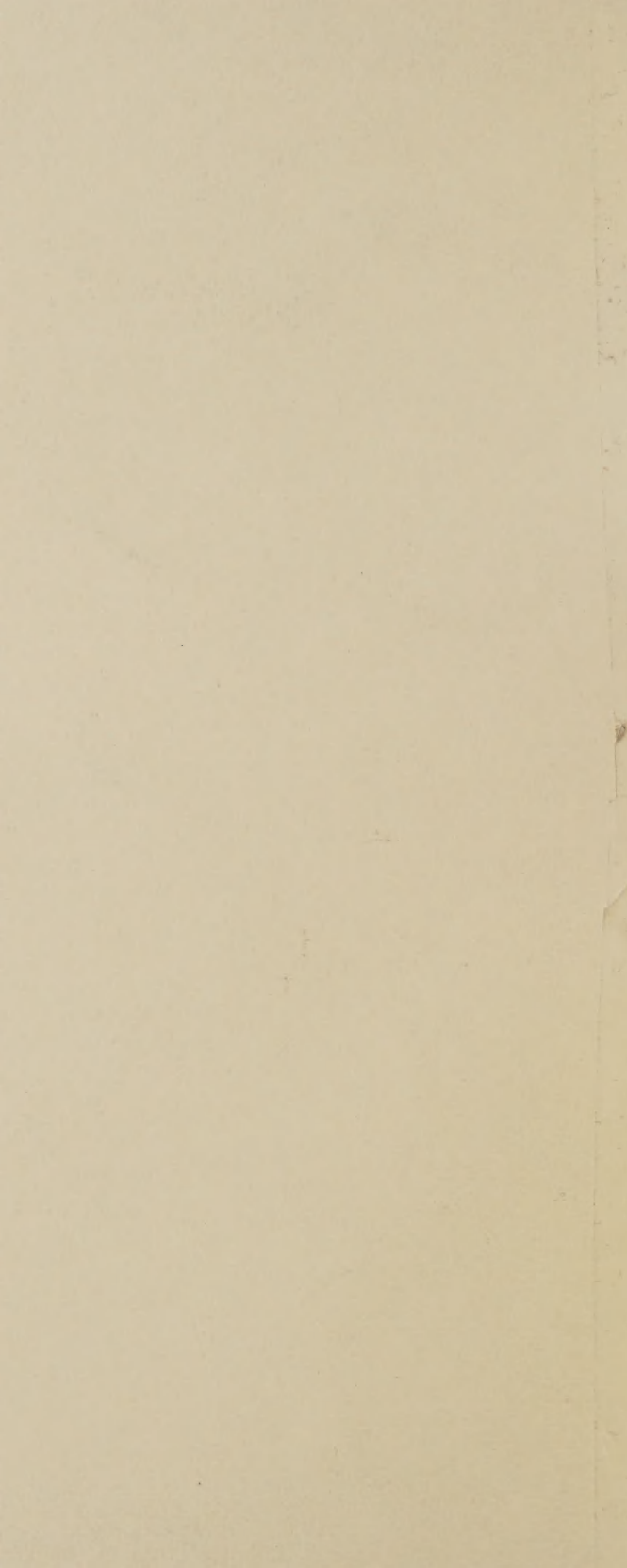


Historic, Archive Document

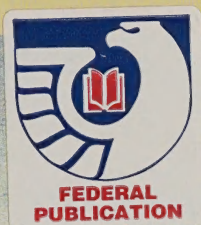
Do not assume content reflects current scientific knowledge, policies, or practices.



Invasive Weeds

You can help stop their spread!

Reserve
aSB612
.A2I59
2004



Invasive Weeds:

- **Destroy** wildlife habitat
- **Reduce** opportunities for hunting, fishing, camping and other recreational activities
- **Displace** threatened and endangered plants and animals
- **Reduce** plant and animal diversity because of weed monocultures – single plant species that overrun all others in an area
- **Disrupt** waterfowl and migratory bird flight patterns and nesting habitats
- **Cost** millions of dollars for treatment and loss of productivity to private landowners



United States Department of Agriculture, Forest Service,
Intermountain Region, Humboldt-Toiyabe National Forest

Leafy Spurge

Euphorbia esula

- Perennial
- Grows up to 3 feet tall
- Small clusters of yellowish-green flowers with showy bracts
- Plant contains a milky sap
- Reproduces by vigorous and



Head

m caput-

annual grass

2 to 2 feet tall

is are more or

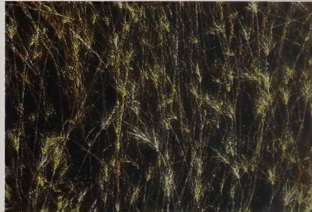
a long-awned

twisted awns

essive and

re

y seed



istle

Carduus nutans

- Biennial
- Grows to seven feet tall
- Spiny margins on leaves
- Large flowers are deep rose, violet or purple, and occasionally white
- Single flower nods at end of stem
- Reproduces from seed



Purple Loosestrife

Lythrum salicaria

- ▶ Perennial
- ▶ Grows up to 6 to 8 feet tall
- ▶ Stems are square
- ▶ Rose-purple flowers are very showy from mid-summer to fall
- ▶ Grows in moist or marshy sites
- ▶ Spreads by seed and rhizomes.



Russian Knapweed

Centaurea repens

- ▶ Perennial
- ▶ Grows 1 ½ to 3 feet tall
- ▶ Forms dense colonies
- ▶ Black roots may grow deeply in some soils
- ▶ Pink, white or lavender cone-shaped flower heads are ¼ to ½ inch in diameter
- ▶ Spreads by seed and roots

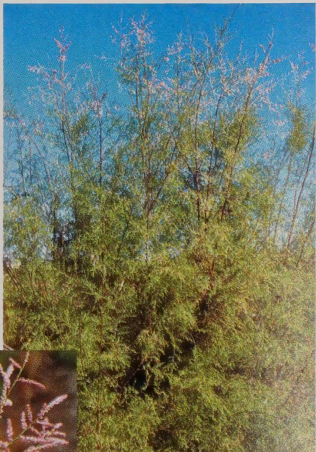


Saltcedar

a.k.a. Tamarisk

Tamarix ramosissima

- ▶ Deciduous or evergreen, deep-rooted shrubby tree
- ▶ Grows 5 to 20 feet tall
- ▶ Reddish-brown bark and pink to white flowers
- ▶ Forms dense colonies
- ▶ Spreads by seed and disturbed roots



Spotted Knapweed

Centaurea maculosa

- ▶ Biennial
- ▶ Grows 1 to 3 feet tall
- ▶ Single flowering heads develop at the end of branches from June to October
- ▶ Flowers are pinkish-purple or rarely cream-colored, with spots on bracts
- ▶ Spreads by seed and can invade healthy rangelands



Dalmatian Toadflax

Linaria genistifolia ssp. *dalmatica*

- ▶ Perennial
- ▶ Grows to 3 feet tall
- ▶ Heart-shaped waxy green leaves
- ▶ Yellow flowers look like snapdragon
- ▶ Has extensive, deep root system
- ▶ Spreads by seed and underground root stalks



Yellow Starthistle

Centaurea solstitialis

- ▶ Annual or short-lived perennial
- ▶ Grows 1 to 3 feet tall
- ▶ Grayish-green plant with rigid stems
- ▶ Bright yellow flower heads are about 1 inch in diameter
- ▶ Flowers have long, sharp, rigid spines at the base
- ▶ Spreads by seed



Perennial Pepperweed a.k.a. Tall Whitetop

Lepidium latifolium

- ▶ Perennial
- ▶ Grows 2 feet to 6 or more feet tall
- ▶ White flowers resemble baby's breath
- ▶ Forms dense colonies
- ▶ Spreads by seed and creeping roots



Puncturevine

Tribulus terrestris

- ▶ Annual
- ▶ Has trailing stems ½ to 5 feet long that form a flat mat
- ▶ Small, yellow flowers
- ▶ Seeds have sharp, spiny burs that stick to tires and socks
- ▶ Spreads by seed



Hoary Cress

Cardaria draba

- ▶ Perennial
- ▶ Grows up to 2 feet tall
- ▶ Has a deep root system
- ▶ White flower clusters have flat tops
- ▶ Spreads by seed and from root segments if the soil is tilled



Plant photos are courtesy of:
Whitson, Tom D., Larry C. Burrill, Steven A. Dewey, David W. Cudney, B.E. Nelson,
Richard D. Lee and Robert Parker. 1996. *Weeds of the West*. The Western Society
of Weed Science in cooperation with the Western United States Land Grant
Universities Cooperative Extension Service. 630 pp.

Spread the Word—Not the Weeds!

Any time people or their animals work or play in areas infested by invasive weeds, there is a chance they will move the infestation to a new area.

When invasive weeds spread, they displace native plant species that provide food and habitat for wildlife, people and livestock.



Weed seeds contained in feed for pack animals can be lost along the trail.

Weeds cost us money by reducing the land's natural and agricultural productivity and can increase maintenance costs and reduce the usefulness of recreation areas as well. Some estimates place the economic impact of fighting leafy spurge in 1990 at more than \$100 million in the Great Plains alone.

How it happens

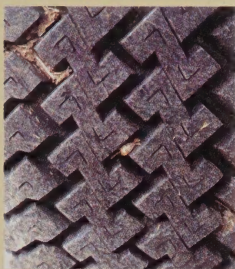
When a vehicle is driven through a weed-infested area, weed seeds may become lodged between the tire treads, in the coils of a winch, behind the license plate, or in cracks and crevices on the underside of the vehicle. Seeds may travel hundreds of miles before becoming dislodged in an area where weeds were not previously found. The source of many infestations has been traced to roads, trails, railroads and other transportation corridors.

Weeds can pass through the digestive tracts of animals and still grow. Pack animals that receive contaminated feed before being moved to hunting or riding areas can deposit weed seeds in the new location days later.

Animals to be moved should therefore receive only feed that is certified weed-free at least 96 hours before entering

back country areas. Pack animals should also be brushed before relocating, and their hooves should be cleaned to remove any weed seeds.

Because many invasive weeds have pretty flowers, they are often picked and used in floral arrangements. New weed infestations can be established when seeds shake off while the "pretty flowers" are being transported, or after the flowers are discarded. Some weeds can develop roots and produce new plants directly from parts, even after weeks of use as decorations.



When a vehicle is driven through a weed-infested area, weed seeds may become lodged between tire treads.



Weed seeds that cling to camping gear can be spread to the next camp site.

What you can do



- Drive only on established roads and trails away from weed infested areas.
- When using pack animals, carry only feed that is certified weed-free.
- For 96 hours prior to entering back country areas, feed pack animals only feed that is certified weed-free.
- Remove weed seeds from pack animals by brushing them thoroughly and cleaning their hooves before transporting.
- If you find a few weeds without flowers or seeds, pull them and leave them where found. If flowers or seeds are present, place the weeds in a plastic bag or similar container and dispose of them properly.
- If you find a weed-infested area, let the landowner or land managing agency know so that they can take steps to control the weeds. Call one of the mapping contacts listed below to report the site where the weed was encountered. As outdoor recreationists spending considerable time in the back country, your assistance in mapping efforts would be of great value in the war against invasive weeds!

If you have global positioning satellite (GPS) site information:

Contact Dave Pickel – Natural Resource Conservation Service at 775/784-5863, extension 118;
dpickel@nv.nrcs.usda.gov

If you have general mapping information:

Contact Wayne Johnson – University of Nevada Cooperative Extension at 775/784-1334; fax, 775/784-1342; wjohnson@cabnr.ag.unr.edu

If you have questions:

Contact your local Cooperative Extension office.
www.invaders.nv.blm.gov

Sincere appreciation

The following groups helped make this brochure possible: Mule Deer Foundation, Nevada Bureau of Land Management, Nevada Weed Management Association, Rocky Mountain Elk Foundation, University of Nevada Cooperative Extension, U.S. Forest Service, Humboldt-Toiyabe National Forest, USDA Natural Resources Conservation Service, U.S. Fish and Wildlife Service.